

Abstract

Acanthamoeba castellanii is a free-living protozoa that can cause serious human illnesses. These illnesses include *Acanthamoeba* keratitis and granulomatous *Acanthamoeba* encephalitis. In the case of *Acanthamoeba* keratitis, the amoeba can cause an inflammatory disease of the cornea, which can, in extreme cases, cause blindness. Granulomatous *Acanthamoeba* encephalitis, which mainly affects immunodeficient individuals, leads to an inflammatory disease of the brain and is often fatal. The goal of this work is to elucidate the interaction between this pathogenic amoeba and the host of these diseases. Special attention will be paid to the enzymes of *A. castellanii* contributing to its pathogenesis, by way of interaction between the amoeba and the hosts tissue and components of the hosts immune system, which are involved in the defence against amoebic infections.

Key words: *Acanthamoeba castellanii*, *Acanthamoeba* keratitis, granulomatous *Acanthamoeba* encephalitis, immune response